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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/945,345

08/30/2001

Jack Yiu-Bun Lee

17329-004001

1501

20985

7590

08/29/2006

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EXAMINER

DAVIS, CYNTHIA L

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,345

Applicant(s)

LEE, JACK YIU-BUN

Examiner

Cynthia L. Davis

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/12/2006, 7/24/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-17 and 22-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 and 22-38 is/are allowed.
- 6) ☒ Claim(s) 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/12/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 7/24/2006, with respect to claims 2-14, 25, 26, and 30 have been fully considered and are persuasive. The rejections of the claims have been withdrawn.
2. Applicant's arguments, filed 7/24/2006, with respect to the rejection(s) of claim(s) 15-17 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Kato, Rhee and Min references.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato in view of Rhee and Min.

Regarding claim 15, a method for receiving video content at a receiver is disclosed in Kato, column 3, lines 32-35. Receiving packets, where in the packets include data and error-correction information about the data is disclosed in Kato, figure 6, elements S21 and S22. If packets received without error in the receiving step include less than all the data, whereby some of the data has been lost, hereinafter referred to as lost data, sending a message based on the identity of at least some of the lost data, receiving a retransmission triggered by the sent message, wherein the retransmission includes less than all of the lost data, recovering all of the lost data using information

from the packets received without error in the receiving packet step and using the received transmission is disclosed in Kato, figure 6 (error correcting is performed on all the lost data in step S22, and then a subset of that lost data which was not able to be fixed by error correction is identified in S24 for retransmission in step S25). Buffering received data at the receiver, including data of retransmission, to allow for continuous play of the video content received at the receiver is missing from Kato. This is disclosed in Rhee, column 2, lines 9-13 (disclosing buffering received and retransmitted frames). It would have been obvious to one skilled in the art at the time of the invention to buffer the received and retransmission data in the system of Kato. The motivation would be to stop error propagation (see Rhee, column 2, lines 1-10). That the packets are multicast is missing from Kato. This is disclosed in Min, column 3, lines 55-59. It would have been obvious to one skilled in the art at the time of the invention to transmit multicast packets using the system of Kato. The motivation would be to be able to transmit broadcast video, which is essential in broadband networks (see Min, column 3, lines 55-57).

Regarding claim 16, the message identifying and requesting retransmission of less than all lost data packets of the multicasted group of packets, and wherein the transmission includes retransmission of less than all the lost data packets of the multicast group of packets is disclosed in Kato, figure 6, element S25, and column 10, lines 50-54 (a request for a data packet corresponding to one of the plurality of data segments containing errors is issued).

Regarding claim 17, the sending step including sending at least a portion of the message, even before every packet of the multicasted group of packets has either arrived at the receiver or been determined as lost to the receiver is disclosed in column 11, lines 31-35 (the request is issued when a segment is found to contain errors; this may occur before the whole broadcast, or group, of packets is received at the receiver).

Allowable Subject Matter

4. Claims 2-14 and 22-38 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L. Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CLD
8/21/2006Handwritten signature and date "8/21/06" with a stylized "CLD" above it.Handwritten signature of Chau Nguyen.

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600